

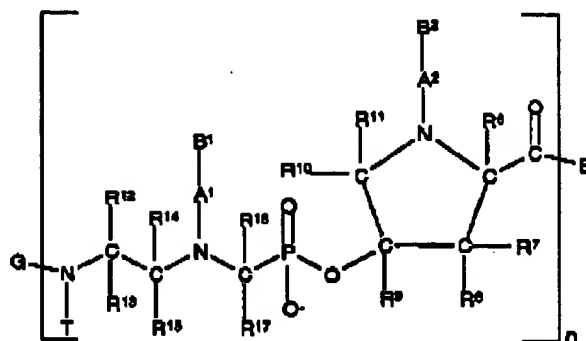
USSN: 09/805,296

20 Apr 2005

Claim Amendments and Status

1-107. (canceled)

108. (previously amended) A compound comprising the structure:



wherein G is selected from a group consisting of H and a protecting group;

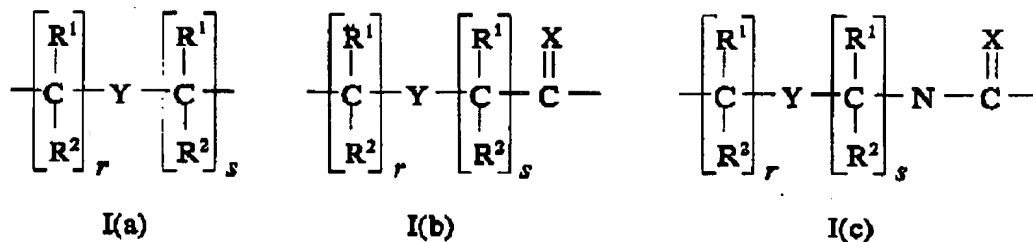
wherein E is selected from a group consisting of O-, OH, a protecting group, and an activating group;

wherein each B¹ and B² is independently selected from the group consisting of H and a nucleobase, and wherein amino groups, if present, are, optionally, protected by amino protecting groups;

wherein each A¹ and each A² is, independently, a group of formula (Ia), (Ib), or (Ic);

USSN: 09/805,296

20 Apr 2005



wherein r and s are, for I(a), I(b), and I(c) independently of one another, values from 0 to 5;

wherein each R^1 and each R^2 is, independently, hydrogen, $(C_1 - C_6)$ alkyl, hydroxy-, alkoxy-, amino-, or alkythio-substituted $(C_1 - C_6)$ alkyl, hydroxy, alkoxy, alkylthio, amino, or halogen;

wherein each R^4 and each R^5 is, independently, hydrogen, $(C_1 - C_6)$ alkyl, hydroxy-, alkoxy-, amino-, or alkythio-substituted $(C_1 - C_6)$ alkyl, hydroxy, alkoxy, amino, aryl, aralkyl, heteroaryl, or an amino acid side chain;

Y is a single bond, O, S, or NR^4 ; and

X is O, S, Se, NR^5 , CH_2 , or $C(CH_3)_2$;

wherein each R^6 is, independently, hydrogen, $(C_1 - C_6)$ alkyl, hydroxy-, alkoxy-, amino-, or alkythio-substituted $(C_1 - C_6)$ alkyl, aryl, aralkyl, heteroaryl, or an amino acid side chain;

wherein R^7 is, independently, hydrogen, $(C_1 - C_6)$ alkyl, hydroxy-, alkoxy-, amino, or alkythio-substituted $(C_1 - C_6)$ alkyl, hydroxy, alkoxy, alkylthio, amino, aryl, aralkyl, heteroaryl, or hydrogen, and R^8 is hydrogen, $(C_1 - C_6)$ alkyl, hydroxy-, alkoxy-, amino-, or alkythio-substituted $(C_1 - C_6)$ alkyl, aryl, aralkyl, or heteroaryl; or R^7 is hydrogen, $(C_1 - C_6)$ alkyl, hydroxy-, alkoxy-, amino-, or alkythio-

USSN: 09/805,296

20 Apr 2005

substituted (C₁ -C₆)alkyl, aryl, aralkyl, or heteroaryl, and R⁸ is hydrogen, (C₁ -C₆)alkyl, hydroxy-, alkoxy-, amino-, or alkythio-substituted (C₁ -C₆)alkyl, hydroxy, alkoxy, alkylthio, amino, aryl, aralkyl, heteroaryl, or halogen;

wherein each R⁹ is independently, hydrogen, (C₁ -C₆)alkyl, hydroxy-, alkoxy-, amino-, or alkythio-substituted (C₁ -C₆)alkyl, alkoxy, aryl, aralkyl, or heteroaryl;

wherein each R¹⁰ and each R¹¹ is, independently, hydrogen, (C₁ -C₆)alkyl, hydroxy-, alkoxy-, amino-, or alkythio-substituted (C₁ -C₆)alkyl, aryl, aralkyl, heteroaryl, or an amino acid side chain;

wherein each R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, and each R¹⁷ is, independently, hydrogen, (C₁ -C₆)alkyl, hydroxy-, alkoxy-, amino-, or alkythio-substituted (C₁ -C₆)alkyl, hydroxy, alkoxy, alkylthio, aryl, aralkyl, heteroaryl, or an amino acid side chain;

wherein T is hydrogen, (C₁ -C₆)alkyl, hydroxy-, alkoxy-, amino-, or alkythio-substituted (C₁ -C₆)alkyl, hydroxy, alkoxy, alkylthio, aryl, aralkyl, heteroaryl, or an amino acid side chain; and

n is 1 or greater,
and salts thereof.

109. (previously added) The compound of claim 108, wherein n is 2 or greater.

110. (cancelled)

111. (cancelled)

112. (previously added) The compound of claim 108, wherein at least one B¹ or at least one B² is a nucleobase.

USSN: 09/805,296

20 Apr 2005

113. (previously added) The compound of claim 112, wherein at least one B¹ or at least one B² is a naturally-occurring nucleobase.

114-129. (cancelled)